

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	
)	
Recommendations of the Independent Panel)	EB Docket No. 06-119
Reviewing the Impact of Hurricane Katrina on)	
Communications Networks)	
)	
To: The Commission)	

COMMENTS OF THE NTI GROUP, INC

Billy Pitts
President, Government Affairs
THE NTI GROUP, INC.
1919 Pennsylvania Avenue, NW
Washington, DC 20006
(202) 349-7165

Seth A. Davidson
Steven J. Hamrick
FLEISCHMAN AND WALSH, L.L.P.
1919 Pennsylvania Avenue, NW
Suite 600
Washington, DC 20006
(202) 939-7900

Its Attorneys

August 7, 2006

TABLE OF CONTENTS

SUMMARY	i
INTRODUCTION AND BACKGROUND	2
DISCUSSION	6
I. Encouraging the Deployment of TSN will Further the Implementation of the Independent Panel’s Recommendations for Improving Emergency Communications to the Public	6
A. TSN Services Facilitates Message Consistency and Can Deliver Targeted Information in the Voice of a Credible Spokesperson	8
B. TSN Can Be Used in All Types of Emergencies in All Portions of the Country to Reach All At-risk Populations (Including Non-English Speakers and the Disabled)	9
C. TSN Services are Designed to Minimize the Risk of Systemic Failure and to Maximize Successful Message Delivery	11
II. Actions the Commission Can and Should Take to Facilitate the Further Deployment of TSN Technology	14
A. Actions Relating to the Provision of Emergency Communications to the Public	14
B. Other Recommended Actions	15
CONCLUSION	16

SUMMARY

One-to-many, time-sensitive notification (“TSN”) systems combine advanced computing with the near ubiquity of phone service to create an intelligent, one-to-many notification system that allows governments and first responders to record voice messages and have them delivered to thousands of people in minutes, and was one of the success stories identified by the Independent Panel. TSN services offer a reliable, user-friendly, and performance-tested means of addressing of the shortcomings described by the Independent Panel. TSN technology has the advantage of ensuring that the information delivered to the public is both uniform and tailored to the audience, and also permit governmental entities to communicate emergency information through a familiar voice of authority, be it the voice of a mayor, county executive, governor, school superintendent or another recognized “credible spokesperson.”

One of the great advantages of TSN technology is that it has already proven to be a reliable emergency notification mechanism in all parts of the country and in all types of crisis situations. For example, while TSN technology’s scalability allows it to generate a large volume of calls in a very short period of time, the fact that it is a “hosted” application also makes it well-suited for use in smaller communities and rural areas since there is no equipment to install or maintain and the shared architecture of the system holds down individual users’ costs. Moreover, TSN systems can be and are used to deliver messages (and receive responses) in a number of different languages.

TSN services are far less susceptible to the types of systemic problems that can frustrate existing modes of emergency communication because TSN services are designed with multiple redundancies that minimize the risk that the conditions giving rise to a crisis situation

will impede or interrupt the delivery of emergency information. Advanced TSN systems also offer interactive features that allow officials not only to confirm successful message delivery, but also to obtain vital information back from the public, greatly assisting in recovery and relief efforts. Finally, information disseminated over TSN platforms is more likely to be timely and consistent than information distributed via broadcast technologies because of the speed at which TSN services are able to send messages.

In light of TSN's performance capabilities, and the Independent Panel's findings, the Commission should: (1) directly examine the benefits of TSN technology through inclusion of TSN services in any funded pilot programs that it establishes or in which it participates with other agencies, such as the Department of Homeland Security, the National Oceanic and Atmospheric Administration, or the Department of Education; (2) mandate the incumbent local exchange carriers to grant fast access to their telephone numbers databases and to provide regular updates at a reasonable cost; and (3) take steps to include TSN technology on the list of eligible services in the Schools and Libraries Universal Service support mechanism. Furthermore, the Commission should: (1) require that communications industry consensus groups include multiple technologies with off-site capabilities in their communications plans, including TSN; (2) assist in promoting extensive, cross jurisdictional coordination and in the formation of a interagency-sponsored industry group modeled on the Commission's public safety communications councils, the Aeronautical Emergency Communications System plan, or the Spectrum Policy Task Force; and (3) encourage state and local jurisdictions to provide for a first responder communications system that features multiple technologies (for backup) and network redundancies to allow for communications in message clogged or environmentally-impacted areas.

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	
)	
Recommendations of the Independent Panel)	EB Docket No. 06-119
Reviewing the Impact of Hurricane Katrina on)	
Communications Networks)	
)	
To: The Commission)	

COMMENTS OF THE NTI GROUP, INC.

The NTI Group, Inc. (“NTI”)¹, by its attorneys, hereby submits its comments in response to the Commission’s Notice of Proposed Rulemaking in the above-referenced proceeding to implement the recommendations of the Independent Panel Reviewing the Impact of Hurricane Katrina on Communications Networks (“Independent Panel”). NTI, which actively participated in the work of the Independent Panel, is one of the nation’s leading providers of one-to-many, time-sensitive notification (“TSN”) services.² The Independent Panel recognized that TSN services were used with great success to disseminate emergency information during last summer’s storms. Consistent with that finding, the Commission should adopt certain measures that will encourage and facilitate increased deployment of TSN services. The Commission also should include TSN in its implementation of the Independent Panel’s recommendations regarding pre-disaster preparations, recovery coordination, and first responder communications.

¹ The NTI Group, Inc. formerly was known as Notification Technologies, Inc.

² Billy Pitts, NTI’s President, Government Affairs, served as a member of the Independent Panel and also presented testimony to the Panel. Mr. Pitts’ statement before the Independent Panel is available at <http://www.fcc.gov/eb/hkip/presenters060130/p20.pdf>

INTRODUCTION AND BACKGROUND

In its review of the impact of Hurricane Katrina on the performance and recovery of the affected area's telecommunications and media infrastructure, the Independent Panel identified a number of shortcomings in existing services and systems. However, the Independent Panel also found examples of success stories. One such success story was the use of TSN services by several communities as a vehicle for communicating emergency information to the public both in advance of the storm and during the post-storm recovery period.

TSN services combine advanced computing with the near ubiquity of phone service to create an intelligent, one-to-many notification system that allows governments and first responders to record voice messages and have them delivered to thousands of people in minutes.³ Originally deployed primarily by elementary and secondary schools as a mechanism for rapid communications between and among educators, parents and students, TSN has proved to be a valuable tool for alerting and informing members of the public in emergency situations and is increasingly being deployed by other levels of government.⁴

TSN technology represents a quantum leap forward from earlier auto-dialer notification systems. In contrast to auto-dialers, which lack the speed, capacity, flexibility and "intelligence" necessary to serve as a reliable provider of emergency information to the public, TSN providers employ a hosted "Application Service Provider" model that makes TSN a far more robust and user-friendly tool for communicating information in urgent situations. While a standard 48-port auto-dialer system takes over eight and a half hours to make a single attempt to send a 30-second

³ The United States has a telephone penetration rate of 92.4 percent for landline phones and 62 percent for mobile phones. See *Federal State Board on Universal Service*, Order, 36 CR 1279, ¶ 8 (2005); *Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993*, Tenth Report, FCC 05-173, ¶ 5 (rel. Sept. 20, 2005).

⁴ NTI has developed TSN services for a variety of users and audiences, including CONNECT-ED (elementary and secondary schools), CONNECT-CTY (community-wide), CONNECT-GOV (intra-agency), and CONNECT-MIL (military). See generally <http://ntigroup.com/products/products.asp?z=20060731080719>.

message to 50,000 people, an advanced TSN system is capable of delivering messages (including making repeat calls where necessary) to tens of thousands of recipients in just a matter of minutes.⁵

TSN systems operate as follows: An authorized user with access to either a landline or cell phone interfaces with the password-protected system via a toll-free number and records an outgoing voice message. The user can then program this message (either via a secure Internet connection or over the phone) to be sent immediately, or at a specified time, to either an entire universe of recipients or to selected subgroups. The target audience typically receives TSN messages on their landlines or cell phones; however, advanced TSN technology is capable of delivering messages to other personal communications devices, such as a Blackberry, PDA, or a standard e-mail account. Some TSN systems even offer a geographic mapping function that gives users the ability to send messages to all telephones in a particular area. Using this feature, a city could, for example, notify all persons within a five-block area of an evacuation order or a school district could alert a group of parents waiting at a single bus stop that their children's transportation has been delayed or re-routed due to an accident or weather conditions. It further allows officials to identify regions that might need to receive different information, for instance, if region one is to receive an evacuation notice at 1:00 PM and region two at 9:00 PM.

As noted above, the Independent Panel identified the use of TSN technology as one of the success stories before, during, and after last summer's catastrophic storms. The Independent Panel described how the St. Charles Parish Public School District used TSN technology to send out recorded evacuation messages to over 21,000 phone numbers in advance of the storm's

⁵ Typically, TSN providers will make three to five attempts before considering a notification process complete. Speed of delivery will vary based on congestion at the local network operations center.

impact and then continued to utilize this technology to provide members of the public with specific information regarding conditions in the community in the storm's aftermath.⁶

The Independent Panel's discussion of the benefits that accrued from the use of TSN technology during Hurricane Katrina barely scratches the surface. For example, in the case of St. Charles Parish, the TSN messages sent before, during, and after Hurricane Katrina played a key role in holding the entire community together in a time of extraordinary crisis. Prior to the deployment of TSN technology, the school district's most effective means of mass communications was announcements made over the PA system at Friday night football games; in contrast, TSN technology enabled the school district to make more than 114,000 successful storm-related calls to the community's 21,000 residents over a 27 day period, a remarkable achievement given that the local telephone infrastructure was greatly distressed due to the hurricane. The types of messages sent included:

- information regarding the extent and location of damage within the parish and the reconstruction and reopening of the parish's schools;
- job-related information targeted to school district employees (the largest employee base in the parish); and
- information targeted specifically to the families of the additional students re-located to the parish from other school districts in the greater New Orleans area.

The dissemination of information via TSN technology not only helped inform and reassure a community that was largely un-served by television or radio due to power outages and other service disruptions, but also assisted the Parish's Emergency Operations Center in monitoring the capacity of the local telephone lines by constantly analyzing call delivery

⁶ Independent Panel Report at 28.

reports.⁷ Based on this experience, the school district and the phone company have discussed working together in future emergency situations in order to overlay data so that the phone company can determine where outages have been repaired.⁸

Other examples abound of how TSN technology has served to supplement and enhance existing mechanisms for communicating with the public in a variety of emergency situations.

These include:

- Before and after both Hurricane Katrina and Hurricane Rita, the East Baton Rouge Parish School district used NTI's *Connect-ED* system to send urgent messages to more than 34,000 phone numbers to inform families and employees about school closings. In all, the district sent over 11 hurricane-related messages to their constituents.
- After Hurricane Katrina made landfall, the Lafayette Parish School District sent messages to nearly 300 transportation employees to request that they volunteer their assistance in a city-wide rescue operation. The parish also delivered several messages to over 56,000 phone numbers regarding pre- and post-Katrina school closings and reached over 61,000 phone numbers with advance information regarding Hurricane Rita.
- Officials with the El Dorado (CA) Irrigation District delivered more than 9000 TSN messages area homes, schools, and businesses warning them about the inadvertent distribution of tainted water and providing information as to what uses of the water were safe and what uses should be avoided.
- Following the discovery of a school shooting plot in Marshfield (MA), TSN messages were sent to all parents giving an update about the situation, quelling rumors and misinformation that had been rapidly spreading about the incident.⁹

⁷ Message delivery success rates in the school district dipped as low as 8% on August 29th but climbed back up to 28% just seven days later. Within a month, the district was back to a standard +80% success rate.

⁸ As a result of its experience using TSN technology during a major crisis, the St. Charles Parish School District is now collecting contact information from all staff members and the parents of children enrolled in its schools three (3) times per year rather than once per year in order to ensure that data is up-to-date. Furthermore, the district is accepting relocation contact information so that they can communicate with staff and families who have evacuated – improving the likelihood that local citizens will receive important information from community officials even when local telephone lines might be impacted within the parish itself.

⁹ News clippings regarding the examples cited in the text (as well as more detailed summary of the hurricane-related TSN messages sent by various Louisiana parishes) are attached to these comments as Exhibit A.

While the examples given above generally involve weather-related emergencies, TSN can be used to convey vital information before, during or after crises of all kinds – amber alerts chemical spills, terror attacks, pandemic, etc. Moreover, TSN technology is scalable (allowing it to be deployed in communities of all sizes and in regions of the country), requires no new equipment, and does not have a steep learning curve for users. The versatility of TSN technology is illustrated by the fact that NTI alone is currently delivering more than 10 million messages a month.

DISCUSSION

I. Encouraging the Deployment of TSN will Further the Implementation of the Independent Panel’s Recommendations for Improving Emergency Communications to the Public.

The purpose of the instant proceeding is to identify measures that the Commission can take in order to implement the recommendations made by the Independent Panel as they apply not only to weather-related crises, but also to other possible emergency situations, such as a terror attack or pandemic. With respect to the area of emergency communications with the public, one of the Independent Panel’s key findings was that “the use of communications networks to disseminate reliable and relevant information to the public is critical – before, during, and after such events.”¹⁰ Unfortunately, the Independent Panel also found that the nation’s current mechanisms for communicating emergency information to the public suffer from a variety of limitations and shortcomings.

For example, the Independent Panel cited several weaknesses inherent in the use of broadcast technologies to disseminate emergency communications (whether through the EAS or through local or national news programming), including the risk that the public’s access to

¹⁰ Independent Panel Report at 27.

broadcasting will be interrupted by events occurring during the emergency, such as a power outage or wind damage to signal transmission or reception equipment. Moreover, even if the conditions giving rise to the emergency have not disrupted the flow of information, broadcast-based mechanisms can only reach those members of the public who happen to be watching TV or listening to radio when the emergency message is aired.

Another shortcoming of broadcast-based notification services is that they generally cannot target their messages to specific areas and audiences and thus run the risk of creating confusion by providing irrelevant or incorrect information to a portion of the public receiving the message. Finally, broadcast-based emergency notification mechanisms generally are of limited utility for persons with disabilities or members of the public who do not speak English.

In light of these shortcomings, the Independent Panel made several recommendations aimed at improving emergency communications to the public, including the following:

- Pursue the establishment of a comprehensive national warning system that complements existing systems and allows local officials to increase the penetration of warnings and to target alerts to particular areas.
- Commence efforts to ensure that persons with disabilities and non-English speaking Americans receive meaningful emergency information.
- Improve coordination of public information functions in order to facilitate the delivery to the public of consistent and reliable emergency information.¹¹

As discussed below, TSN services offer a reliable, user-friendly, and performance-tested means of addressing of the shortcomings described by the Independent Panel. As a result, the Commission can and should take steps to encourage and facilitate the deployment of TSN technology.

¹¹ *Id.* at 40-42.

A. TSN Services Facilitates Message Consistency and Can Deliver Targeted Information in the Voice of a Credible Spokesperson.

According to the Independent Panel, one of the shortcomings in the dissemination of emergency information during last year's hurricanes was the confusion engendered by the lack of a consistently accurate and reliable source of information.¹² The failure of the impacted communities to fully utilize the existing EAS meant that the public was dependant on reports from mass media sources (particularly broadcast radio and television) that often misconstrued events or provided inaccurate information. Even where the EAS was operational or media reports were accurate, the information provided tended to be either over or under inclusive in terms of its relevance to the various areas impacted by the disaster.

In contrast, TSN technology has the advantage of ensuring that the information delivered to the public is both uniform and tailored to the audience. TSN services can deliver consistently worded messages to as many or as few recipients as is appropriate given the circumstances. Thus, for example, in the event of a health crisis, times and instructions for the receipt of medical treatment could be delivered on a neighborhood-by-neighborhood basis, minimizing the risk of institutions being overwhelmed by panic-stricken citizens.

A closely-related and equally significant advantage of TSN systems is that they permit governmental entities to communicate emergency information through a familiar voice of authority, be it the voice of a mayor, county executive, governor, school superintendent or another recognized "credible spokesperson." The benefit of using a "credible spokesperson" to speak to the public in times of emergency is widely recognized.¹³ As Dr. Julie Gerberding, the

¹² *Id.* at 30.

¹³ See A Guide for Developing Crisis Communications Plans, Michigan Crisis and Emergency Risk Communications, Michigan Office of Public Health Preparedness, http://www.michigan.gov/documents/Michigan_Crisis_Emergency_and_Risk_Communication3_82364_7.doc (Oct.

Director for the Centers for Disease Control and Prevention, said in the context of communicating to the public about a smallpox threat, “Now, people really look toward the most credible spokesperson, especially when there is a lot of uncertainty on an issue, and that’s going to be very important and helpful to us to have people at the local level that are trusted and credible come out and be able to educate people about this. We’re really counting on that.”¹⁴ Only an emergency notification system that allows a single point of presence to formulate and deliver the message can achieve the goal of a “credible spokesperson.”

B. TSN Can Be Used in All Types of Emergencies in All Portions of the Country to Reach All At-risk Populations (Including Non-English Speakers and the Disabled).

In a Public Notice released on July 26, 2006, the Commission requested that commenters discuss whether proposals for implementing the Independent Panel’s recommendations needed to be modified to account for different types of emergency situations and different regional conditions (e.g., variations in topography, susceptibility to a particular type of disaster, or communications capabilities). One of the great advantages of TSN technology is that, as described earlier in these comments, it has already proven to be a reliable emergency notification mechanism in all parts of the country and in all types of crisis situations.

For example, while TSN technology’s scalability allows it to generate a large volume of calls in a very short period of time, the fact that it is a “hosted” application also makes it well-suited for use in smaller communities and rural areas since there is no equipment to install or maintain and the shared architecture of the system holds down individual users’ costs. In

2003); “Emergency Management Plans,” Kevin Brown, MD, http://www.gnyha.org/eprc/general/presentations/20030204_Emergency_Plans.pdf.

¹⁴ Interview with Dr. Julie Gerberding, Online NewsHour, http://www.pbs.org/newshour/bb/health/july-dec02/gerberding_smallpox.html.

addition, TSN services are easy to use, either directly or with the assistance of the TSN provider, and the ubiquity of land-lines, coupled with the rapid adoption rate of cell phones, ensures that residents of rural areas will have access to up-to-date information relevant to their specific geographic location.

The fact that TSN has proven its utility in a variety of crisis situations is illustrated by the examples (e.g., tainted water supply emergency, school shooting plot emergency) described above. TSN technology also is particularly well-suited for use in other emergencies, such as a pandemic. The National Governor's Association has published a "Primer for Governors and Senior State Officials" entitled "Preparing for a Pandemic Influenza"¹⁵ whose discussion of "Public Communications Strategies" closely echoes the recommendations of the Independent Panel. For example, the Primer advises that "[b]oth before and during a pandemic, state and local officials should assume responsibility for extensive interaction with the public"¹⁶ and notes that "[i]n previous infectious disease outbreaks, it was found that the community generally wants information from people they recognize as authoritative."¹⁷ As the Primer points out, "[d]isease outbreaks frequently are marked by uncertainty, confusion, and a sense of urgency"¹⁸ and "[t]he primary goal for public officials, especially at the state and local level, will be communicating with the public in a crisis in a way that helps to build, maintain or restore public trust."¹⁹ TSN services can address each and every one of the concerns raised by the National Governors'

¹⁵ A copy of the Primer is available on-line at <http://www.nga.org/Files/pdf/0607PANDEMICPRIMER.PDF>

¹⁶ *Id.* at 12.

¹⁷ *Id.* at 13.

¹⁸ *Id.* at 14.

¹⁹ *Id.* at 12.

Association for ensuring that the public is kept informed and provided with appropriate instructions in the event of a pandemic health crisis.

Finally, another issue raised by the Independent Panel was the need to ensure that emergency information was available to non-English speaking and disabled Americans. TSN systems can be and are used to deliver messages (and receive responses) in a number of different languages.²⁰ As a result, broad utilization of TSN providers would help address the concern raised by the Independent Panel regarding the need to improve the provision of multilingual emergency communications in areas in which languages other than English are of primary fluency. In addition, because TSN messages can be sent to text-based as well as voice-based devices, it is capable of reaching hearing impaired and sight-impaired members of the public that might otherwise not have access to emergency information.

C. TSN Services are Designed to Minimize the Risk of Systemic Failure and to Maximize Successful Message Delivery.

The Independent Panel described how existing emergency communications mechanisms failed during Hurricane Katrina. TSN services are far less susceptible to the types of systemic problems that can frustrate existing modes of emergency communication because TSN services are designed with multiple redundancies that minimize the risk that the conditions giving rise to a crisis situation will impede or interrupt the delivery of emergency information. For example, NTI's TSN services are designed not only to deliver messages to a variety of devices (e.g., landline telephones, cellular phones, PDAs, e-mail, etc.), but also to provide users with the benefits of carrier redundancy, power redundancy, and database redundancy.

Carrier redundancy is achieved by locating TSN systems on several local exchange carriers' ("LECs") and interexchange carriers' networks, allowing the TSN system user to place

²⁰ "Spanish Speakers Get the Message," TheState.com, April 16, 2005 (copy attached as Exhibit B).

thousands of calls without the call traffic congestion that would occur if all of the calls passed through a single LEC's central office. For instance, if a mayor chose to initiate calls from an auto-dialer located within his or her city, both the outgoing calls and the incoming calls would cause the LEC to experience congestion. By initiating calls from multiple sites located outside of the LEC's service area, a TSN service provider is able to eliminate one layer of congestion and reduce the risk of system failure. In addition, enhanced TSN systems avoid overwhelming the local network operations center with software that uses mathematical algorithms to analyze network congestion at the local level and sort call traffic automatically. Where call congestion is detected, TSN systems can throttle down how frequently calls are sent while simultaneously looking for less congested paths. Thus, for example, when NTI's advanced TSN technology detects a certain level of congestion, it can redirect calls to other central offices, so that a local telephone network is less likely to be "exhausted" by urgent calls.²¹

In order to ensure that the ability of governmental authorities to send TSN messages remains uninterrupted even in areas where local power is out, TSN providers can and do operate their systems from multiple sites straddling the nation's three power interconnects. This ensures constant access to power during emergencies; for example, if one of the major power interconnects fails and all back-up resources have been expended, NTI's TSN system can redirect calls to operational centers located on the other two power interconnects to ensure that users' messages are sent. Furthermore, if there is a power failure or other problem associated with a data center in a geographic area, NTI's TSN technology can automatically extract

²¹ Predecessor systems with unsophisticated delivery detection, on the other hand, are not aware of congestion. They are simply programmed to send one call per line upon the previous call's completion. If the system is large enough to get calls through quickly, meaning, if enough phone lines are employed to send calls at one time, then the system could potentially choke the local telephone network to the point of collapse. If the system is small enough to not cause this type of congestion, it is most likely not going to have enough capacity to get calls out to a large number of recipients quickly.

information (*e.g.*, the phone numbers to which calls should be sent) from a redundant data center in another geographic area. Each data center also is supplied with its own back-up systems (gas generators, etc.) to allow the center to remain operational should it experience a power failure.

In addition to these redundancies that minimize the risk of message failure, advanced TSN systems offer interactive features that allow officials not only to confirm successful message delivery, but also to obtain vital information back from the public, greatly assisting in recovery and relief efforts. For example, NTI's advanced TSN technology allows the originator of the emergency communication to receive a report of successful and unsuccessful message deliveries – distinguishing between “live” reception, voice-mail reception, non-reception and non-working numbers – all within minutes of sending the message. The sender then has the option to resend calls to those who did not receive the message.

Even more significantly, TSN technology allows a “sending” party to deliver a message that requests the receiving party's location or that inquires whether the receiving party needs assistance. The receiving party, by using his or her phone's touch-tone capability, can provide an appropriate response. This interactive capacity represents an important advantage over anonymous, one-way broadcast technologies.

Lastly, information disseminated over TSN platforms is more likely to be timely and consistent than information distributed via broadcast technologies because of the speed at which TSN services are able to send messages. For example, NTI's advanced TSN system is currently delivering 400,000 thirty-second voice messages in a half-hour and has contracted Service Level Agreements to ensure the capacity to deliver well over that amount. As discussed above, by employing software that can read congestion at the local carrier level, TSN providers are better

able to ensure that more calls can get through the pipe at the local level quickly by minimizing network congestion.

II. Actions the Commission Can and Should Take to Facilitate the Further Deployment of TSN Technology.

In light of the proven reliability of TSN systems in delivering communications between and among government entities and citizens before, during, and after emergency situations, the technological superiority of TSN system to other “one-to-many” communications systems, and the compatibility of TSN technology with other alerting systems, NTI respectfully requests that the Commission take certain actions to encourage the widespread use of TSN technology.

A. Actions Relating to the Provision of Emergency Communications to the Public.²²

First, the Commission should directly examine the benefits of TSN technology through inclusion of TSN services in any funded pilot programs that it establishes or in which it participates with other agencies, such as the Department of Homeland Security, the National Oceanic and Atmospheric Administration, or the Department of Education. TSN providers’ ability to send vast numbers of voice messages within minutes to the public (or to key agency personnel) would be invaluable to these agencies (and the public) in times of terror or catastrophic weather.

Second, a TSN system, like any system using telephones, will suffer absent a Commission mandate directing the incumbent LECs to grant fast access to their telephone numbers databases and to provide regular updates at a reasonable cost. Without such access, government entities using TSN technology will not be able to update their calling lists and

²² NTI has made similar recommendations in comments filed on January 24, 2006 in the Commission’s ongoing EAS proceeding (EB Docket No.04-296) and in comments filed on August 30, 2004 and September 1, 2005, in the annual review of the eligible services list for the Universal Service Mechanism for Schools and Libraries (CC Docket No. 02-6).

databases. This can obviously lead to dire consequences when urgent messages and instructions do not reach their intended targets. While many LECs sell listed, unlisted and E911 data to government entities, the process can be slow and updates can be too costly for most municipalities, especially those located in small rural communities.

Third, the Commission should take steps to include TSN technology on the list of eligible services in the Schools and Libraries Universal Service support mechanism. One-to-many telephone message distribution platforms also are “integral” to the educational purposes underlying the schools and libraries program. In fact, Congress has repeatedly recognized that improving communications between and among educators, students and parents is critical to the success of the educational mission. Legislation such as the Enhancing Education Through Technology Act and the No Child Left Behind Act specifically focus on the importance of “using technology to promote parent and family involvement in education and communication among students, parents, teachers, principals, and administrators.”²³

B. Other Recommended Actions

Although the principal focus of these comments has been on how TSN services can and should play a significant role in the Commission’s implementation of the recommendations of the Independent Panel regarding emergency communications to the public, TSN technology also can and should play a role in the implementation of other elements of the Independent Panel’s recommendations, such as the pre-disaster preparations, recovery coordination, and first responder communications.

²³ 20 U.S.C. § 2402(a)(8) (goals of the Enhancing Education Through Technology Act); *see also* Section 1118 of the No Child Left Behind Act, *codified* at 20 U.S.C. § 6318 (emphasizing role of communications in enhancing parental involvement in education).

First, to the extent that the Commission relies on communications industry consensus groups to develop business continuity plans, it should require that these entities include multiple technologies with off-site capabilities in their communications plans, including TSN. The Commission also should take steps to educate non-communications businesses, such as hospitals, nursing homes, day care facilities, etc. regarding their emergency communications options. One way to do this is to place links to communications and emergency network systems on a Commission website. TSN should be included with any such links.

Second, the Commission should assist in promoting extensive, cross jurisdictional coordination and in the formation of a interagency-sponsored industry group modeled on the Commission's public safety communications councils, the Aeronautical Emergency Communications System plan, or the Spectrum Policy Task Force.

Third, the Commission should encourage state and local jurisdictions to provide for a first responder communications system that features multiple technologies (for backup) and network redundancies to allow for communications in message clogged or environmentally-impacted areas.

CONCLUSION

In announcing the establishment of the Independent Panel, Chairman Martin stressed the need for a comprehensive and robust emergency communications system that “allows officials at the national, state and local levels to reach affected citizens in the most effective and efficient manner possible.”²⁴ NTI respectfully requests the Commission to recognize TSN

²⁴ *Hearing on Communications in a Disaster Before the Senate Committee on Commerce, Science, and Transportation* (Sept. 22, 2005) (Testimony of FCC Chairman Kevin J. Martin). *See also Review of the Emergency Alert System, First Report and Order and Further Notice of Proposed Rulemaking*, EB Docket No. 04-296 (rel. Nov. 10, 2005) (Separate Statement of Chairman Martin) (“The system also should take advantage of advances in technology that enable officials to reach large numbers of people simultaneously through a variety of communications media.”).

technology's proven capability for successfully reaching large numbers of people simultaneously in urgent situations and to take the necessary and appropriate steps outlined herein to encourage the broadest use of TSN systems.

Respectfully submitted,

NTI GROUP, INC.

By: 

Seth A. Davidson

Steven J. Hamrick

Billy Pitts
President, Government Affairs
The NTI Group, Inc.
1919 Pennsylvania Avenue, NW
Washington, DC 20006
(202) 349-7165

FLEISCHMAN AND WALSH, L.L.P.
1919 Pennsylvania Avenue, NW
Suite 600
Washington, DC 20006
(202) 939-7900

Its Attorneys

August 7, 2006

Exhibit A

The Sacramento Bee

Tainted water warning issued

El Dorado Hills area's supplies tainted, but no health risk seen.

**By Chris Bowman and Jim Downing -- Bee Staff
Writers Thursday, October 20, 2005 Story appeared on
Page A1 of The Bee**

Occupants of 9,000 homes, schools and businesses in the El Dorado Hills area received contaminated tap water for about 21 hours before the problem was discovered Wednesday morning, and residents were warned not to drink the water.

Officials with the El Dorado Irrigation District first warned nearby schools and then sent out **automated phone messages** advising households and businesses not to drink the water or cook or brush teeth with it for the next 48 hours.

District officials said they mistakenly added coal fly ash at the El Dorado Hills water treatment plant Tuesday afternoon. Operators believed the material was soda ash, which is used to reduce acidity.

After realizing the mistake at 10:30 a.m. Wednesday, the district shut down the plant, switched to untainted supplies and notified state health officials and local schools.

State health officials said that while the chance of the coal ash causing illness is remote, the district acted prudently in taking precautions.

An estimated 4 million gallons of tainted drinking water was distributed before the problem was corrected, district officials said.

Customers may shower, wash clothes and dishes and irrigate

with the water, the district said. But officials said boiling water would not eliminate the contamination.

And they advised against using it for ice or giving it to pets.

Robert Shimizu of El Dorado Hills said he received an automated call about the water problem at about 1 p.m. from the emergency notification system at Oak Ridge High School, his children's school.

Shimizu said he was initially quite concerned, but felt relieved after learning that the fly ash likely was not a major health risk.

Still, Shimizu said he found the treatment plant error disturbing.

"Fly ash - can that be good?"

Shimizu said that his wife, Maria, went to Ralphs in El Dorado Hills to look for bottled water and found it sold out. She later bought some in Folsom, he said.

Health officials said they are investigating the source of the fly ash. Most of the powdery material comes from coal-fired power plants.

While the ash typically contains arsenic, nickel, cadmium and other toxic elements, health officials said the amount of contamination in the El Dorado water supply likely is too small to pose a health risk.

"We believe it is trace amount, therefore we think the public health risk is very low," said Lea Brooks, spokeswoman for the state Department of Health Services.

Brooks said the state and the district took drinking water samples Wednesday for laboratory analysis to determine exactly what contaminants entered the water supply and in what concentrations.

While the district serves more than 100,000 residents in western

El Dorado County, the contamination was limited to supplies purified at the Folsom Lake area treatment plant, which serves El Dorado Hills.

Health officials said they plan to retrace the events leading to the mishap to determine whether the district violated state health laws.

"We'll determine whether there will be any sanctions," Brooks said.

Steve Setoodeh, the district's director of environmental compliance, recounted the events leading to the tainted water:

At noon Tuesday, the treatment plant serving El Dorado Hills received a truckload of what operators believed was soda ash.

The truck pumped about 25 tons of the material into a closed container in the plant. The material is not visible to plant operators during transfer. It was added to the drinking water at the normal rate for soda ash, about eight pounds per hour.

The district buys soda ash for its treatment plants from Brenntag Pacific, a Los Angeles-area company. The company's vice president, Bill Fluharty, said Wednesday the company does not ordinarily distribute fly ash.

Fluharty said the fly ash apparently was shipped inadvertently from Searles Valley Minerals, which operates in the Southern California desert town of Trona, and produces and sells both soda ash and fly ash.

"We are still investigating at this point so that we can clearly identify the problem area," Fluharty said.

At 10:30 a.m. Wednesday, a plant operator noticed that the turbidity gage measuring the cloudiness of water leaving the plant was much higher than normal.

Operators then immediately shut down the treatment plant,

halting the flow of contaminated water to the El Dorado Hills area, a foothills community of more than 30,000.

The district then diverted untainted drinking water from its Sly Park treatment plant to El Dorado Hills customers.

###

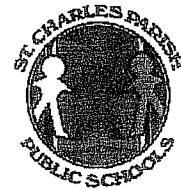
ST. CHARLES PARISH PUBLIC SCHOOL DISTRICT

Luling, Louisiana

Superintendent: Rodney Lafon

Student Population: 9,795

Employee Population: 2,639



Message Title: Hurricane Katrina 1

Type: Connect-ED Emergency Communication

Sent: August 27th, 2005

SUMMARY

On August 27th, 2005 the St. Charles Parish School District's Public Information Officer, Rochelle Cancienne, sent a district-wide Connect-ED emergency message to 21,319 phone numbers. Cancienne related to all parents and staff members the mandatory evacuation procedures that have been implemented due to hurricane Katrina. She provided detailed information regarding the school closing dates and a web site address for additional information. She ended her message by informing parents and staff members that she will continue to relay updated information using the Connect-ED system.

Message Title: Hurricane Katrina 2

Type: Connect-ED Emergency Communication

Sent: August 29th, 2005

SUMMARY

On August 28th, 2005 the St. Charles Parish School District's Public Information Officer, Rochelle Cancienne, sent a district-wide Connect-ED emergency message to 21,319 phone numbers on behalf the President Albert Laque, Sheriff Greg Champagne, and Superintendent Rodney Lafon. Caciennne warns families and staff members not to return to the St. Parish region until further notice. She ended her message by informing families and staff members that she will call them the next morning with a condition update.

Message Title: Dial-In Emergency Communication

Type: Connect-ED Dial-In Emergency Communication

Sent: August 31th, 2005

SUMMARY

On August 31st, 2005 the St. Charles Parish School District's Public Information Officer, Rochelle Cancienne, sent a district-wide Connect-ED emergency message to 21,319 phone numbers with the use of the Connect-ED Emergency Messaging Card. Caciennne relates the damage that the St. Charles Parish had suffered from hurricane Katrina. She informs families and staff members that power should be restored at the St. Charles Parish within two weeks and schools are expected to open shortly after.

Message Title: Dial-In Emergency Communication

Type: Connect-ED Dial-In Emergency Communication

Sent: September 1st, 2005

SUMMARY

On September 1st, 2005 the St. Charles Parish School District's Public Information Officer, Rochelle Cancienne, sent a district-wide Connect-ED emergency message to 21,319 phone numbers with the use of the Connect-ED Emergency Messaging Card. Caciennne informs families and staff members that power is slowly being restored and to check the St. Charles Parish web-site for updated information.

Message Title: Executive Staff-Katrina

Type: Connect-ED Emergency Communication
Sent: September 4th, 2005

SUMMARY

On September 4th, 2005 the St. Charles Parish School District's Public Information Officer, Rochelle Cancienne, sent a Connect-ED emergency message to 20 St. Charles Parish executive staff members to inform them of an executive meeting to be held on September 7th.

Message Title: CO-Maintenance-Custodians-CO
Type: Connect-ED Emergency Communication
Sent: September 4th, 2005

SUMMARY

On September 4th, 2005 the St. Charles Parish School District's Public Information Officer, Rochelle Cancienne, sent a Connect-ED emergency message to 509 St. Charles Parish custodian and maintenance staff members to inform them to report to work on September 7th, 2005.

Message Title: Principal-Katrina
Type: Connect-ED Emergency Communication
Sent: September 4th, 2005

SUMMARY

On September 4th, 2005 the St. Charles Parish School District's Public Information Officer, Rochelle Cancienne, sent a Connect-ED emergency message to 39 St. Charles Parish principals to inform them of a principals meeting to be held on September 8th.

Message Title: Transportation-Katrina
Type: Connect-ED Emergency Communication
Sent: September 4th, 2005

SUMMARY

On September 4th, 2005 the St. Charles Parish School District's Public Information Officer, Rochelle Cancienne, sent a Connect-ED emergency message to 80 St. Charles Parish transportation employees to inform them to report to work on September 12th, 2005.

Message Title: Teachers –School Staff-Katrina
Type: Connect-ED Emergency Communication
Sent: September 4th, 2005

SUMMARY

On September 4th, 2005 the St. Charles Parish School District's Public Information Officer, Rochelle Cancienne, sent a Connect-ED emergency message to 2,137 St. Charles teachers and staff members to inform them to report to work on September 12th, 2005.

Message Title: Katrina-Back to School
Type: Connect-ED Emergency Communication
Sent: September 12th, 2005

SUMMARY

On September 12th, 2005 the St. Charles Parish School District's Public Information Officer, Rochelle Cancienne, sent a Connect-ED emergency message to 23,125 St. Charles families and staff members to announce that school will reopen on September 15th.

Message Title: Dial-In Emergency Communication
Type: Connect-ED Dial-in Emergency Communication

Sent: September 22nd, 2005

SUMMARY

On September 22nd, 2005 the St. Charles Parish School District's Public Information Officer, Rochelle Cancienne, sent a district-wide Connect-ED emergency message to 23,125 phone numbers with the use of the Connect-ED Emergency Messaging Card. Caciene informs families and staff members that due to hurricane Rita, the St. Charles Parish Public schools will be closed on September 23rd.

Message Title: Schools Re-Open 9-26-05

Type: Connect-ED Emergency Communication

Sent: September 25th, 2005

SUMMARY

On Septmeber 25th, 2005 the St. Charles Parish School District's Public Information Officer, Rochelle Cancienne, sent a district-wide Connect-ED emergency message to 23,125 phone numbers to inform all families and staff members that school will re-open on September 26th.

LAFAYETTE PARISH PUBLIC SCHOOL DISTRICT

Lafayette, Louisiana

Superintendent: Dr. James Easton

Student Population: 30,000

Employee Population: 1,679



Message Title: Hurricane Katrina Board Members

Type: Connect-ED Emergency Communication

Sent: August 28th, 2005

SUMMARY

On August 28th, 2005 the Lafayette Parish Public School District H.R. Director, Mona Bernard, sent a Connect-ED emergency message to 20 board members to inform them of the district's plan to close school on August 29th due to hurricane Katrina.

Message Title: Hurricane Katrina - All

Type: Connect-ED Emergency Communication

Sent: August 28th, 2005

SUMMARY

On August 28th, 2005 the Lafayette Parish Public School District Director of Public Relations, Justine Sutley, sent a Connect-ED emergency message to 56,768 phone numbers to inform all families and staff members that the Lafayette Parish Public School District will be closed on August 28th due to hurricane Katrina.

Message Title: Drivers Rescue Effort

Type: Connect-ED Emergency Communication

Sent: August 28th, 2005

SUMMARY

On August 28th, 2005 the Lafayette Parish Public School District Director of Public Relations, Justine Sutley, sent a Connect-ED emergency message to 288 transportation employees. Sutley informs all transportation employees that the Lafayette Parish School District will be participating in a rescue effort, transporting injured victims of hurricane Katrina to nearby hospitals. She ends her call by relaying information regarding this matter.

Message Title: Rita- Board Members
Type: Connect-ED Emergency Communication
Sent: September 22nd, 2005

SUMMARY

On September 22nd, 2005 the Lafayette Parish Public School District director of Public Information, Justine Sutley, sent a Connect-ED emergency message to 9 board members to inform them that school will be closed on September 23rd, 2005 due to hurricane Rita.

Message Title: Closing for Rita
Type: Connect-ED Emergency Communication
Sent: September 22nd, 2005

SUMMARY

On September 22nd, 2005 the Lafayette Parish Public School District Director of Public Relations, Justine Sutley, sent a Connect-ED emergency message to 61,055 phone numbers to inform all families and staff members that the Lafayette Parish Public School District will be closed on September 23rd, 2005 due to hurricane Rita.

Message Title: Dial-In Emergency Communication
Type: Connect-ED Dial-In Emergency Communication
Sent: September 25th, 2005

SUMMARY

On September 25th, 2005 the Lafayette Parish Public School District Director of Public Relations, Justine Sutley, sent a Connect-ED emergency message to 61,063 phone numbers with the use of the Connect-ED Dial-in Emergency Card. Sutley's message informed all families and staff members that the Lafayette Parish Public School District will be closed on September 26th, 2005 due to hurricane Rita. In addition she informed all custodian and maintenance staff to report to work to clean up any damages.

EAST BATON ROUGE PARISH SCHOOL DISTRICT
East Baton Rouge Louisiana
Superintendent: Dr. Charlotte Placide
Student Population: 46,000
Employee Population: 4,137



Message Title: Katrina – Closure Notice
Type: Connect-ED Emergency Communication
Sent: August 28th, 2005

SUMMARY

On August 28th, 2005 the east baton Rouge Parish School District Superintendent, Charlotte Placide, sent a Connect-ED emergency message to 34,739 phone numbers to inform all families and staff members that school will be closed on August 29th and August 30th, 2005 due to hurricane Katrina.

Message Title: Hurricane Rita Closure
Type: Connect-ED Outreach Communication
Sent: September 22nd, 2005

SUMMARY

On September 22nd, 2005 the East Baton Rouge Parish School District Superintendent, Charlotte Placide, sent a Connect-ED message to 34,452 phone numbers to inform all families and staff members that school will be closed on September 23rd, 2005 due to hurricane Rita.

Message Title: Rita Message
Type: Connect-ED Outreach Communication
Sent: September 25th, 2005

SUMMARY

On September 25th, 2005 the East Baton Rouge Parish School District Superintendent, Charlotte Placide, sent a Connect-ED message to 34,452 phone numbers to inform all families and staff members that school will be closed on September 26th, 2005 due the damage caused by to hurricane Rita.

BRAINTREE FORUM

Community Newspaper Company

www.braintreeforum.com

WEDNESDAY, FEBRUARY 2, 2005

Vol. 130, No. 2 75 Cents

Superintendent calls students when there's no school

By Michael Verseckes
MVERSECK@CNC.COM

It isn't every day that the superintendent of schools calls your house, but if the inclement weather keeps up, you could be hearing from him more often.

With the recent barrage of snowstorms, canceling school is now as easy as making a telephone call.

The messages that parents received last week were recorded shortly before 6 a.m. and went out to over 5,000 families, teachers, and staff over the telephone announcing the decision.

The messages are sent through a program called Connect-ED, which is a system created by Notification Technologies Incorporated to facilitate school-to-parent communication.

At the caller's choosing, the message can be sent out to the entire system or it can be directed to a specific school or a particular grade throughout the entire system.

The system is Internet-based, requires no additional software or hardware, and can deliver a message to the entire school system in minutes and on short notice.

After the call goes out, Connect-ED also provides a detailed report via email with the status of the message and the accuracy of delivery.

The system was initially used last

year at the Highlands School, and after a successful year, the entire school system picked up on it.

Connect-ED varies in cost and is based on the size of the school district.

For 5,000 students at \$3 per student, the total cost is roughly \$15,000 and funded through the schools' PTOs, and not through the school budget.

The system works by calling an 800 number, entering a password, and then recording the message.

The caller can choose from options, using a computer or telephone available through the system, that specify a particular time for the call to go out.

At the caller's choosing, the message can be sent out to the entire system or it can be directed to a specific school or a particular grade throughout the entire system.

With the recent snowstorms and school cancellations, school officials say that Connect-ED has been used with effective results.

Highlands School Principal Bruno Zoltowski said that Braintree was the first school system in Massachusetts to pick up on the system.

"The 2003-2004 school year was the first year we had it," Zoltowski said, and right away he could tell that it was a "fantastic system."

He said, "I first saw it in a magazine. I called the company about it, and the PTO jumped on it right away. It's a terrific program. You can let parents know about early dismissal, school cancellations, and any meetings coming up. You can direct the message according to class, grade level, school, and even staff."

Superintendent of Schools Peter Kurzberg said that Connect-ED is an asset to the school system.

"It's a very easy and efficient way to contact people," he said. "One of our goals is to enhance communication with parents, and so far we've gotten very positive feedback."

Aside from weather and possible emergencies, the system can also be used to notify parents and students of field trips and the rescheduling of afternoon events for an entire grade system-wide or for one school.

Peter Kress, business manager for the schools, said that the system is effective and consistent.

"With these recent snowstorms, it's been wonderful to get the message out that school was canceled," he said. "The message goes out at 5:45 a.m. to everyone at the same time, and the superintendent updates everyone on the weather and road conditions when school is cancelled."

The system allows several numbers for each student, including cellular phones, and keeps an accurate tally of which numbers received the message and which did not.

Aside from weather and possible emergencies, the system can also be used to notify parents and students of field trips and the rescheduling of afternoon events for an entire grade system-wide or for one school.

The Connect-ED program is cur-

rently used in thousands of school districts nationwide, and there is no limit on the number of times it can be used in a given year.

Natasha Rabe, vice president of marketing for the Los Angeles-based Notification Technologies, Inc., said that so far over 21 million messages have been sent using the Connect-ED program.

"The system is very flexible, and there aren't many limitations as to how it can be used," she said. "It can be used for everyday, regular parent outreach, attendance, and during emergencies."

Other systems that distribute messages on a large scale typically require additional software and programming and are not as "robust," according to Rabe.

"It's a good system," she said. "It's easy to use, it's easy to train people to use it, and it's very effective."

In a more serious situation, the Connect-ED system was used to reach parents after an alleged school shooting plot was uncovered in the Marshfield schools last September.

As soon as the alleged plot was discovered, the story of the incident rapidly spread around the area, and rumors began to surface distorting the actual events that took place.

Using Connect-ED, Marshfield Superintendent of Schools Thomas Kelly was able to send a message to all parents giving an update about what had actually happened.

Rabe said that through the system, Kelly was able to notify parents, explaining what occurred as well as squelching the rumors surrounding the event.

Exhibit B

SATURDAY April 16, 2005

Spanish speakers get the message

School voice mail program keeps parents up-to-date

By **Czerne M. Reid**
Staff Writer

Phoning 250 people at 5 a.m. is a daunting task. But Dedy Perez-Magun had to do it.

An ice storm two years ago had pushed the school day back two hours, and she needed to let all of Richland 2's Spanish-speaking parents and students know.

"Oh my goodness!" said Perez-Magun, who is in her fourth year as Richland 2's Spanish language liaison. "It took me two hours to contact all my families."

That was the old way.

Now the district uses a Web-based, mass-messaging voice mail system that has slashed the amount of time it spends sending messages, while helping it do a better job of communicating with Spanish-speaking parents and students.

Richland 2 has been pilot-testing Connect-ED in its 13 elementary schools since October 2004 and plans to extend it to all schools by next school year.

The voice messaging system is the latest in Richland 2's ongoing efforts to communicate more effectively with the more than 30 language groups represented in the

district. The district also translates some notices, Web site information and application forms into Spanish. Those steps help Richland 2 meet communications recommendations and requirements tied to federal funding.

Last week, Perez-Magun reminded immigrant students about daylight-saving time so they wouldn't miss the bus the next morning.

It took her five minutes, using the telemarketing-style phone system called Connect-ED, which sends up to 1,000 calls a minute. Administrators and parents say the \$3 per student per year cost to the district is well

worth it.

"For me, it was the great solution," Perez-Magun said. "It makes my job a lot easier."

Spanish-speaking students account for more than half of Richland 2's population of English language learners. The next largest group is Korean, at just more than a tenth. The rest includes languages as diverse as Haitian Creole, Punjabi, Portuguese and Romanian.

For now, the district only sends Connect-ED messages in English and Spanish.

Honduran refugee Melba

Sequeira who came to the United States in 1996, is among the many Spanish-speaking parents who are grateful the district is doing a better job of keeping in touch.

Sequeira, who speaks no English but is learning, has five children ages 4 to 18 in Richland 2 schools, and one who dropped out of high school. Sitting in the green-hued living room of her modest mobile home, Sequeira explained through translator Perez-Magun how the new messaging system has helped her.

Before Perez-Magun and Connect-ED came to Richland 2, Sequeira said, she used to get school

messages in English.

"I just didn't know what was going on," Sequeira said in Spanish, shrugging her shoulders.

With messages now delivered in Spanish, Sequeira said she feels she can keep up with what her children's schools want from her and what she needs to do to help her children.

The best thing that could happen to Richland 2 was for them to start communicating with parents like her in Spanish, she said.

For consistency, Perez-Magun handles all the Spanish messages. Only school principals or the